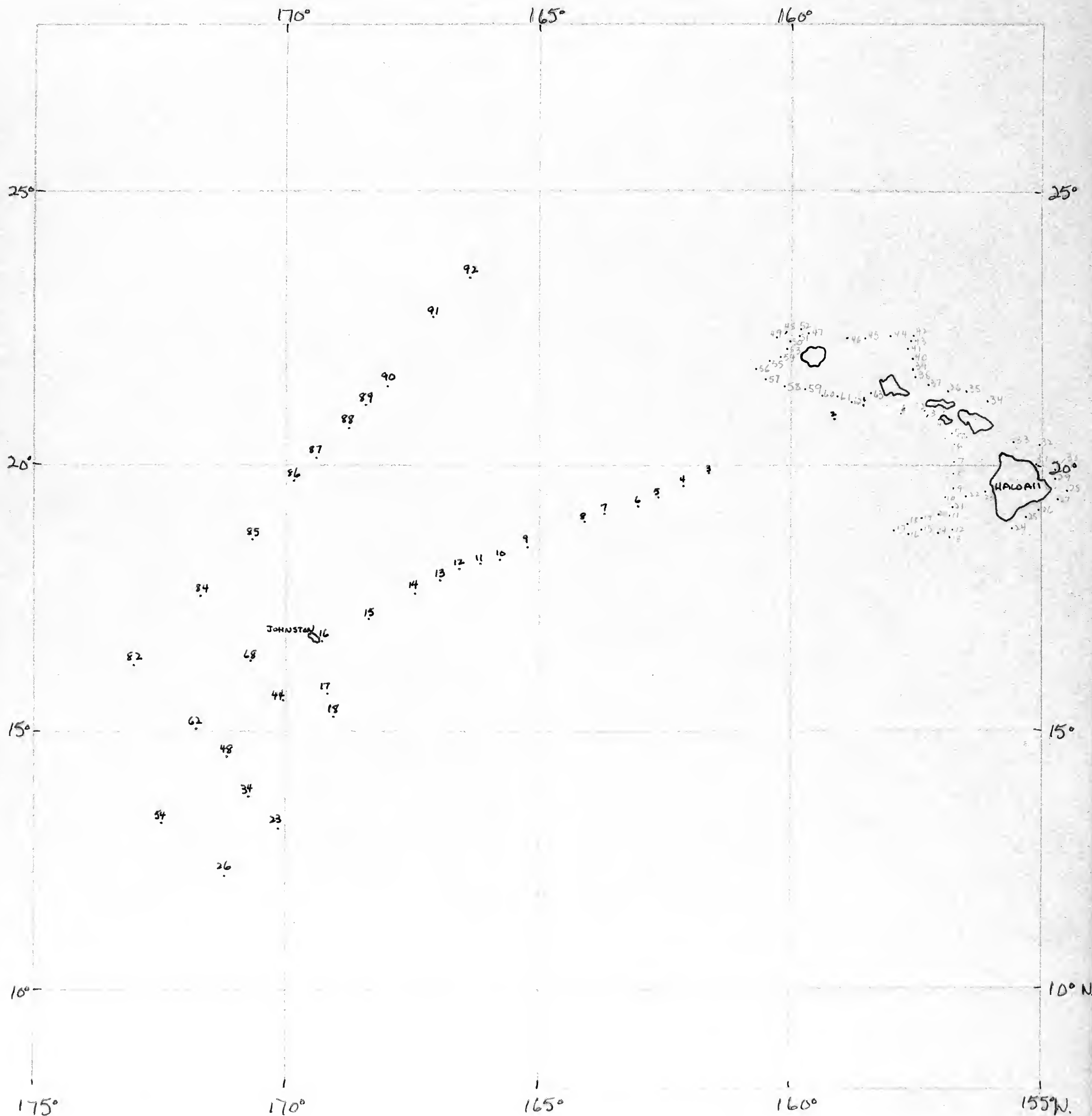


SMITHSONIAN CRUISE #89 - JUNE
6-5-64 to 6-17-64

BT STATIONS



✓ GILBERT CRUISE #74
THIS SECTION:

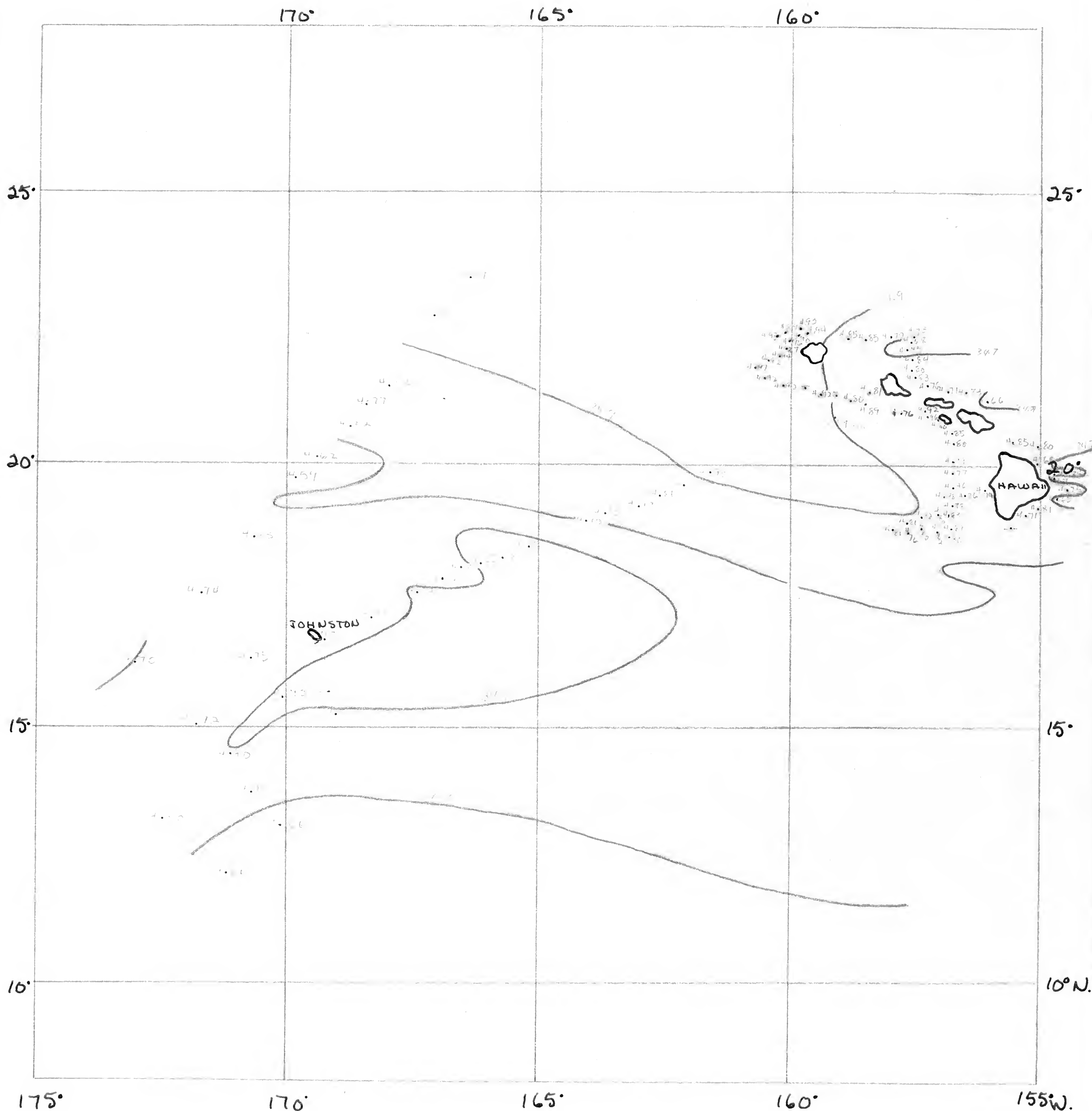
6-24-64 to 6-30-64
7-1-64 to 7-3-64

BT STATIONS

CBT

SMITHSONIAN CRUISE #89-JUNE
6-5-64 to 6-17-64

SURFACE SALINITY ‰

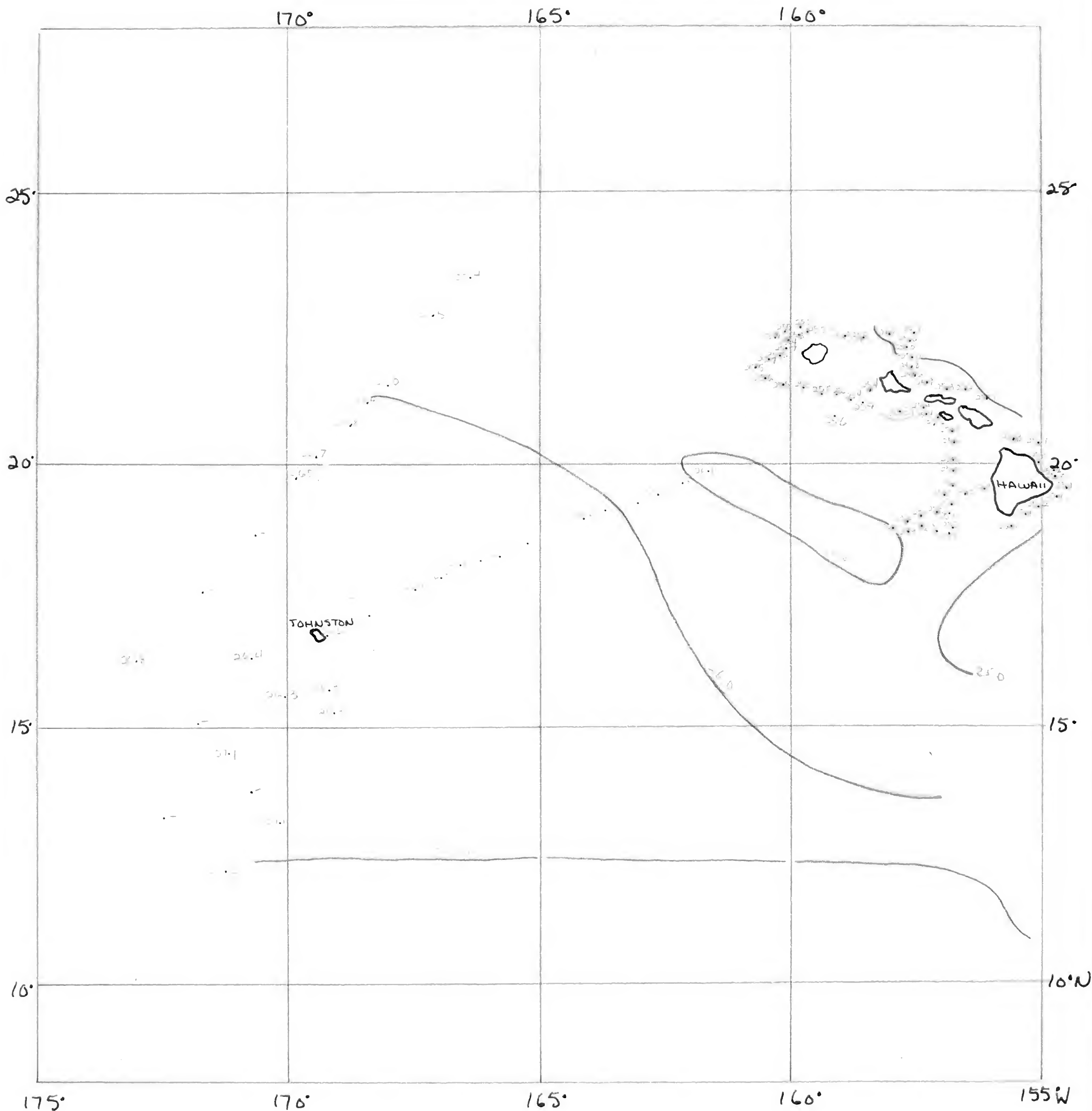


• GILBERT CRUISE #74
THIS SECTION
6-24-64 to 6-30-64
7-1-64 to 7-3-64

SURFACE
SALINITY ‰

SMITHSONIAN CRUISE #89-JUNE
6-5-64 to 6-17-64

CORRECTED
SURFACE TEMP. °C.



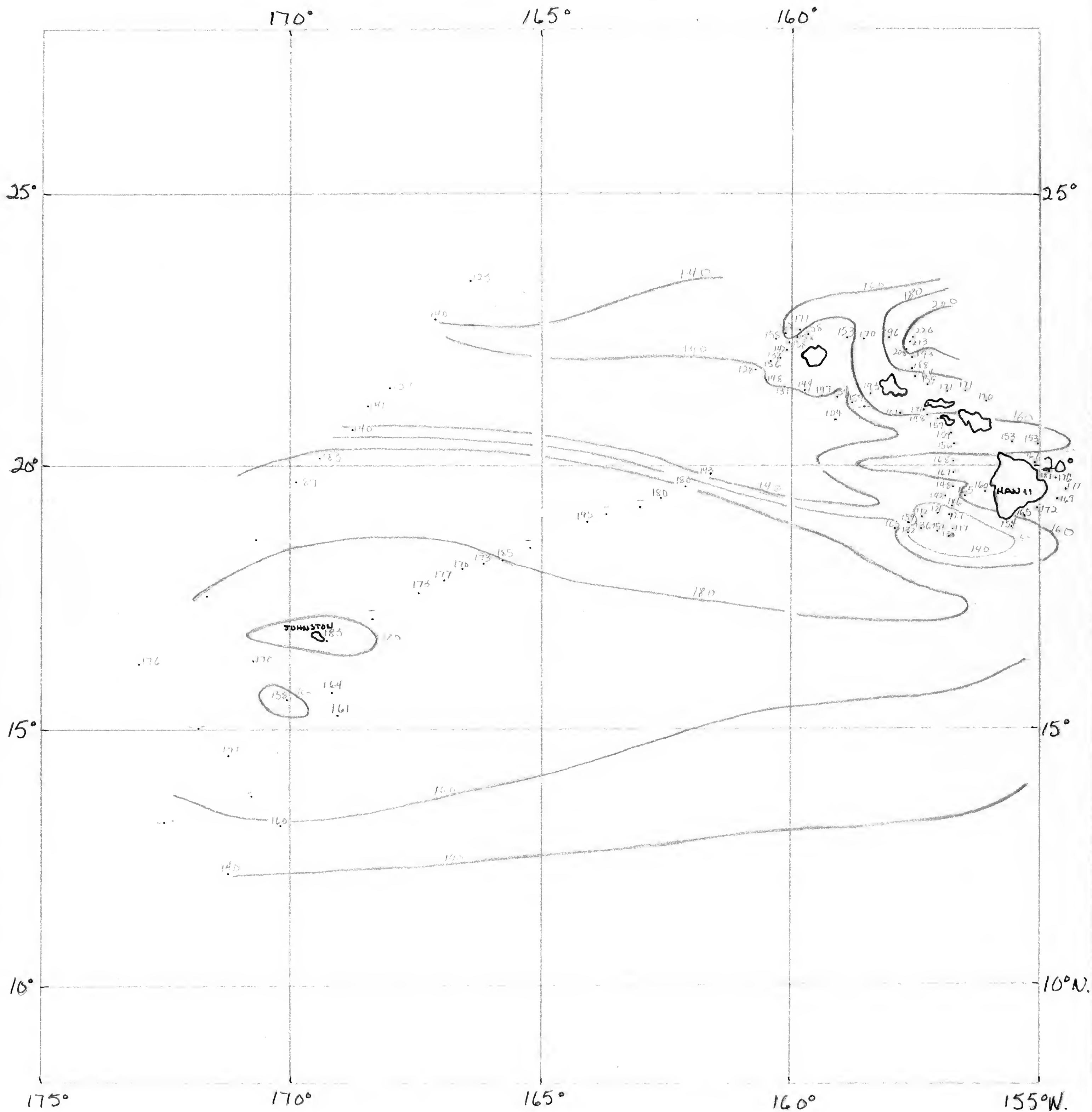
GILBERT CRUISE #74
THIS SECTION

CORRECTED
SURFACE TEMP. °C.

6-24-64 to 6-30-64
7-1-64 to 7-3-64

SMITHSONIAN CRUISE - #89-JUNE
6-5-64 to 6-17-64

20° ISOTHERM
DEPTH IN METERS
BTs 1-18



GILBERT CRUISE #74
THIS SECTION

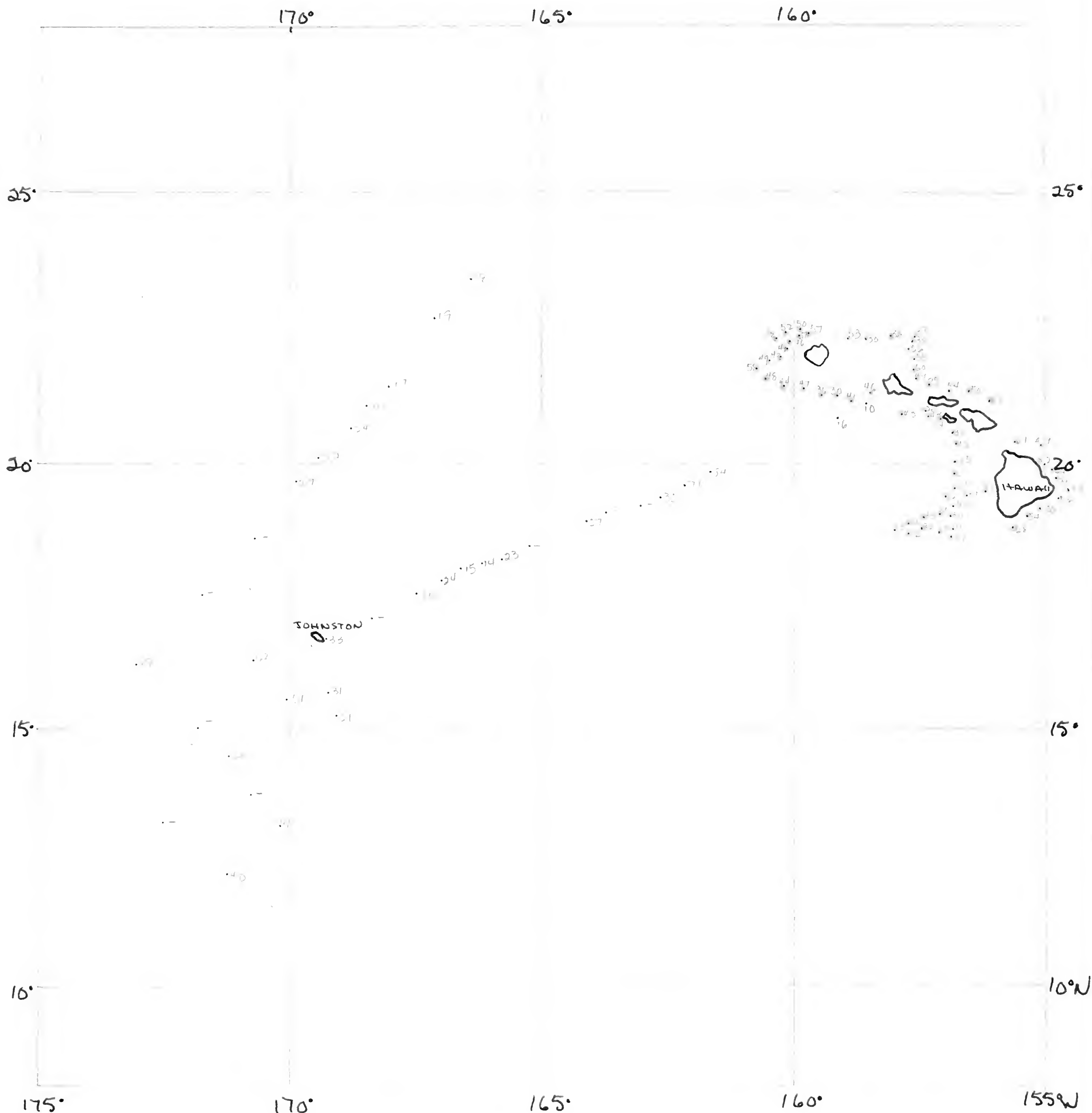
20° ISOTHERM
DEPTH IN METERS

6-24-64 to 6-30-64
7-1-64 to 7-3-64

CBT

SMITHSONIAN CRUISE #89-JUNE
6-5-64 to 6-17-64

DEPTH OF THE
MIXED LAYER-METERS



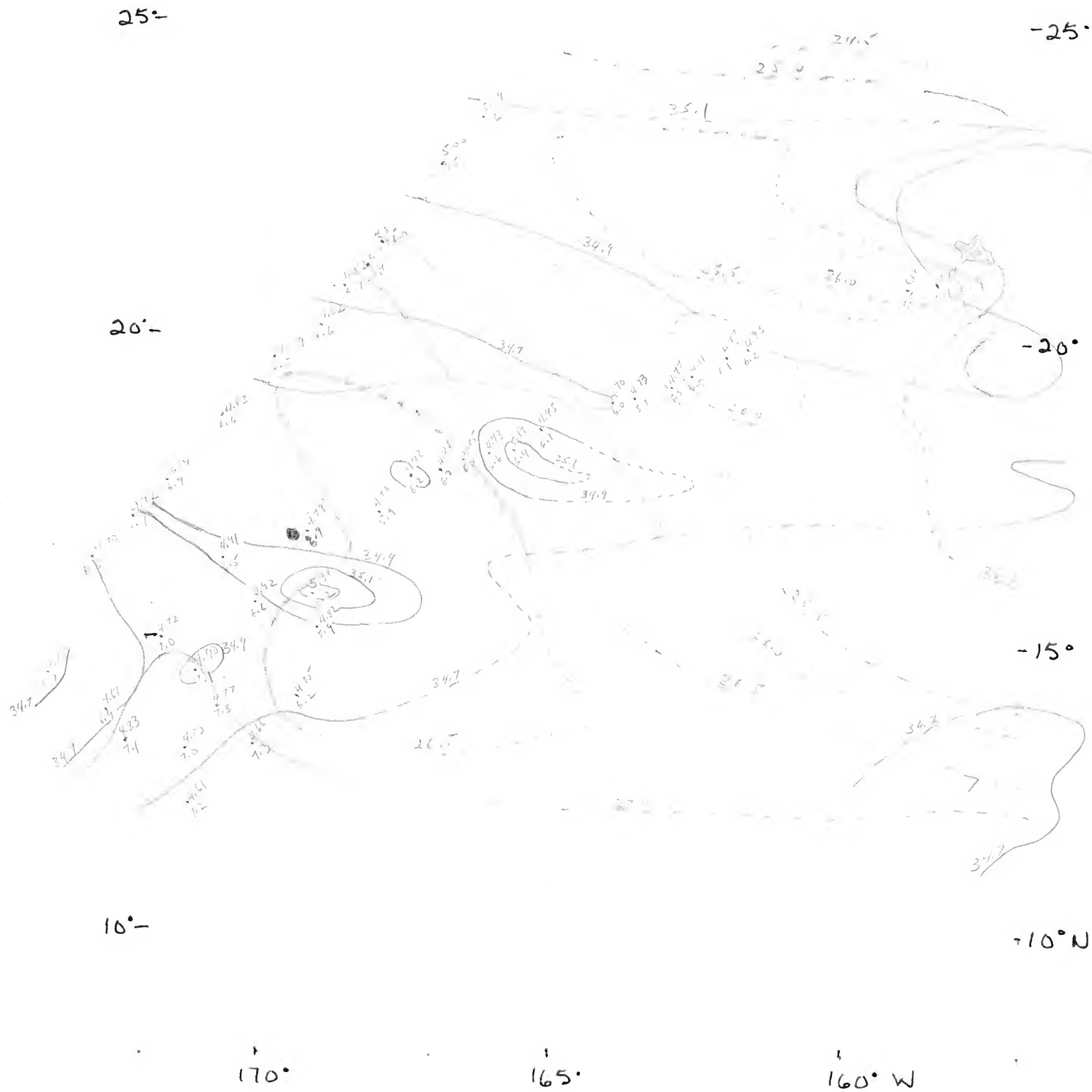
GILBERT CRUISE #74
THIS SECTION!

6-24-64 to 6-30-64
7-1-64 to 7-3-64

DEPTH OF MIXED
LAYER-METERS

SMITHSONIAN CRUISE #89, JUNE
JUNE 5, '64 to JUNE 17, '64
170° 165°

BUCKET TEMP. °C
BUCKET SALINITY ‰
160°



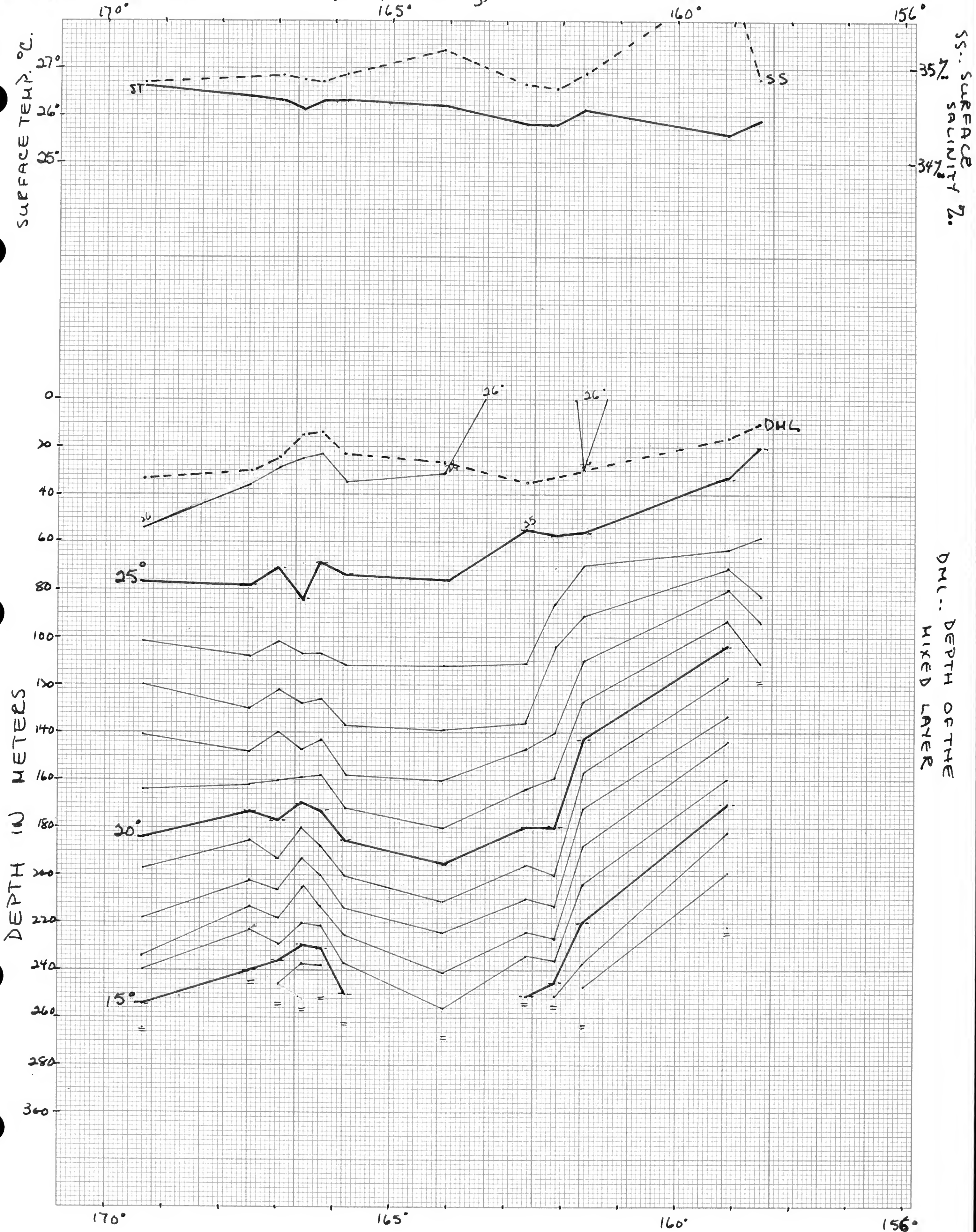
T C

SMITHSONIAN CR. - JUNE #89 BT SECTION (1-16)
6-5-64 to 6-8-64 (6,7,9,15 missing)

18° N. LAT. (AVERAGE)
35-6.19

EUGENE DIETZGEN CO.
MADE IN U. S. A.

NO. 340R-M DIETZGEN GRAPH PAPER
MILLIMETER



SMITHSONIAN CR. JUNE '89
6-14-64 to 6-17-64
175°

BT SECTION (82-92)
(84, 85 NO GOOD)
170°

20° N. LAT. (AVER.)
165° N

EUGENE DIETZGEN CO.
MADE IN U. S. A.

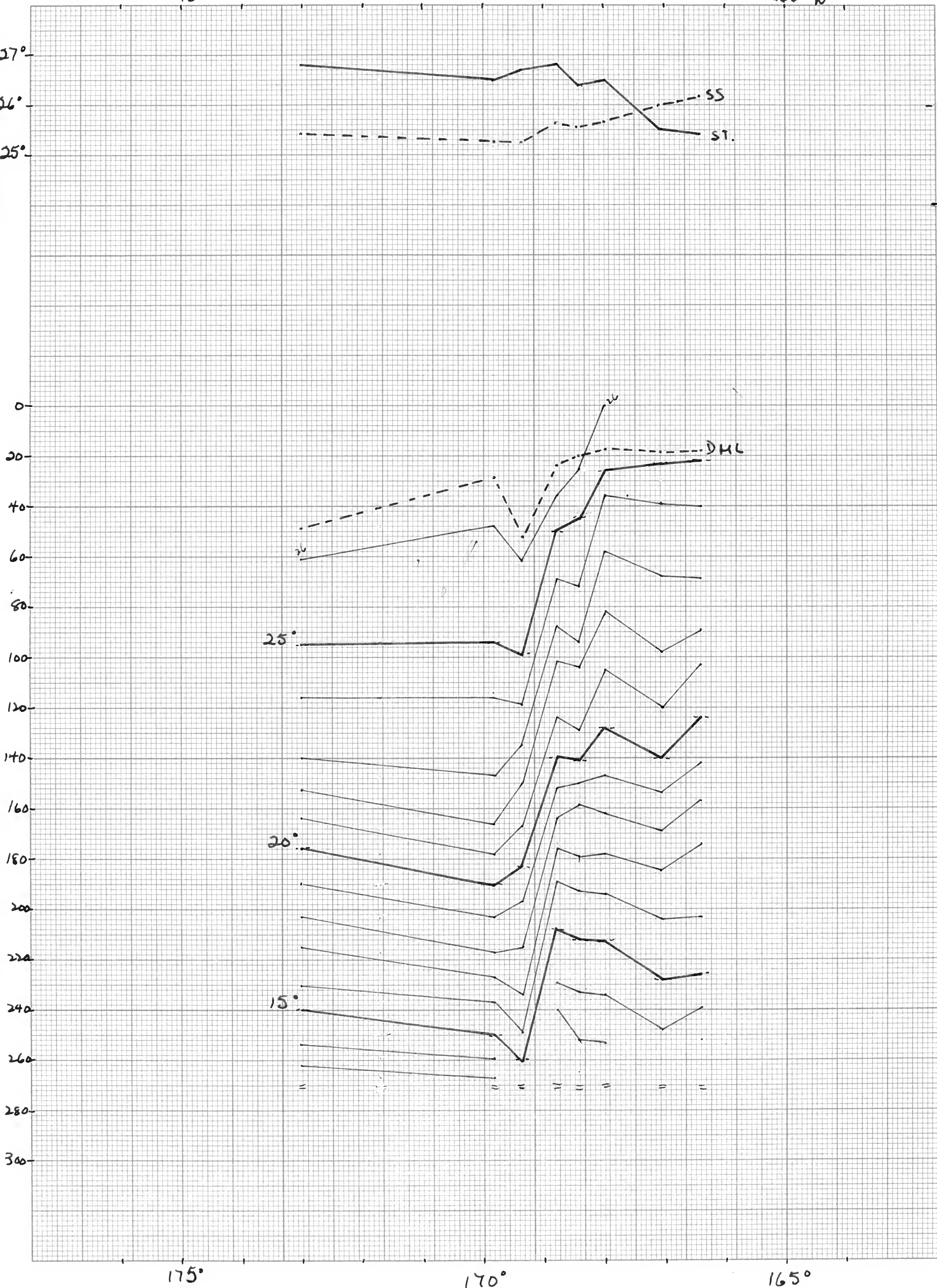
NO. 340R-M DIETZGEN GRAPH PAPER
MILLIMETER

SURFACE TEMP. °C.

SS-- SURFACE
SALINITY ‰

DML-- DEPTH OF THE
MIXED LAYER

DEPTH IN METERS



B T STATION DATA

S.O.S. June Cruise

Sta. #	Local Time	Time			Lat. N	Long. W	Salinity	Temp. °C.
		Day	Mo.	Year				
1	1800	5	VI	64	21° 03'	158° 32'		26.1
2	2100	5	VI	64	20 54	159 06		25.5
3	1200	6	VI	64	19 52	161 38		26.2
4	1500	6	VI	64	19 37	162 07		26.1
5	1800	6	VI	64	19 24	162 37		26.0
6	2100	6	VI	64	19 17	163 01		25.85
7	2400	6	VI	64	19 03	163 38		25.7
8	0300	7	VI	64	18 55	164 04		26.0
9	0900	7	VI	64	18 29	165 16		26.1
10	1200	7	VI	64	18 15	165 48		26.4
11	1500	7	VI	64	18 10	166 13		26.6
12	1800	7	VI	64	18 03	166 33		26.0
13	2100	7	VI	64	17 51	166 58		26.2
14	0000	8	VI	64	17 36	167 27		26.2
15	0600	8	VI	64	17 08	168 22		25.9
16	1200	8	VI	64	16 42	169 20		26.9
17	1800	8	VI	64	15 45	169 13		26.2
18	2100	8	VI	64	15 21	169 05		25.9
23	1300	9	VI	64	13 12	170 10		27.3
26	2280	9	VI	64	12 10	171 15		27.2
34	1400	10	VI	64	13 45	170 46		27.3
44	0800	11	VI	64	15 35	170 02		26.55
48	1700	11	VI	64	14 31	171 12		27.1
54	0300	12	VI	64	13 16	172 29		27.1
62	1900	12	VI	64	15 02	171 49		27.0
68	0800	13	VI	64	16 20	170 43		26.8
82	2300	14	VI	64	16 17	173 01		26.5
84	1200	15	VI	64	17 33	171 43		26.9
85	2100	15	VI	64	18 38	170 42		26.7
86	0600	16	VI	64	19 43	169 50		26.5
87	0900	16	VI	64	20 07	169 22		26.6
88	1500	16	VI	64	20 45	168 47		26.9
89	1800	16	VI	64	21 08	168 26		26.4
90	2100	16	VI	64	21 28	168 00		26.0
91	0600	17	VI	64	22 42	167 04		25.5
92	1200	17	VI	64	23 24	166 25		25.6

BT 62347 - BAR PRESSURE ELEMENT

S.O.S JUNE #89

STATION No.	SLIDE No.	Surf.	Temp.	Diff.	Correction	Corrected Surf. T.				
		BT	BT+							
1	1	26.3	26.1	.2	+.4	25.9				
2	2	.0	25.5	.5		.6				
3	3	.5	26.2	.3		26.1				
4	4	.2	.1	.1		25.8				
5	5	.2	.0	.2		.8				
✓ 6	6	-	-	-		-				
✓ 7	7	-	-	-		-				
8	8	26.6	26.0	.6		26.2				
✓ 9	9	-	-	-		-				
10	10	26.7	26.4	.3		26.3				
11	11	.7	.6	.1		.3				
12	12	.5	.0	.5		.1				
13	13	.7	.2	.5		.3				
14	14	.8	.2	.6		.4				
✓ 15	15	-	-	-		-				
16	16	27.0	26.9	.1	+.2	26.6				
17	17	26.7	.2	.5		.3				
18	18	.7	25.9	.8		.3				
23	19	27.5	27.3	.2		27.1				
26	20	.6	.2	.4		.2				
* 44	* 22	26.7	26.6	.1		26.3				
48	23	27.5	27.1	.4		27.1				
✓ 54	24	-	-	-		-				
✓ 62	25	-	-	-		-				
68	26	27.2	26.8	.2		26.4				
82	27	.2	.5	.7		.8				
✓ 84	28	-	-	-		-				
✓ 85	29	-	-	-		-				
86	30	26.8	26.5	.3		26.5				
87	31	27.0	.6	.4		.7				
88	32	.1	.9	.2		.8				
89	33	26.7	.4	.3		.4				
90	34	.3	.0	.3		.0				
91	35	25.8	25.5	.3		25.5				
92	36	.7	.6	.1		.4				
✓ 34	* 21	-	-	-		-				

✓ Surface temp. but, on very hot days

BT # 62347 - Pressure element bad.

B T STATION DATA S.O.S. June Cruise - #89

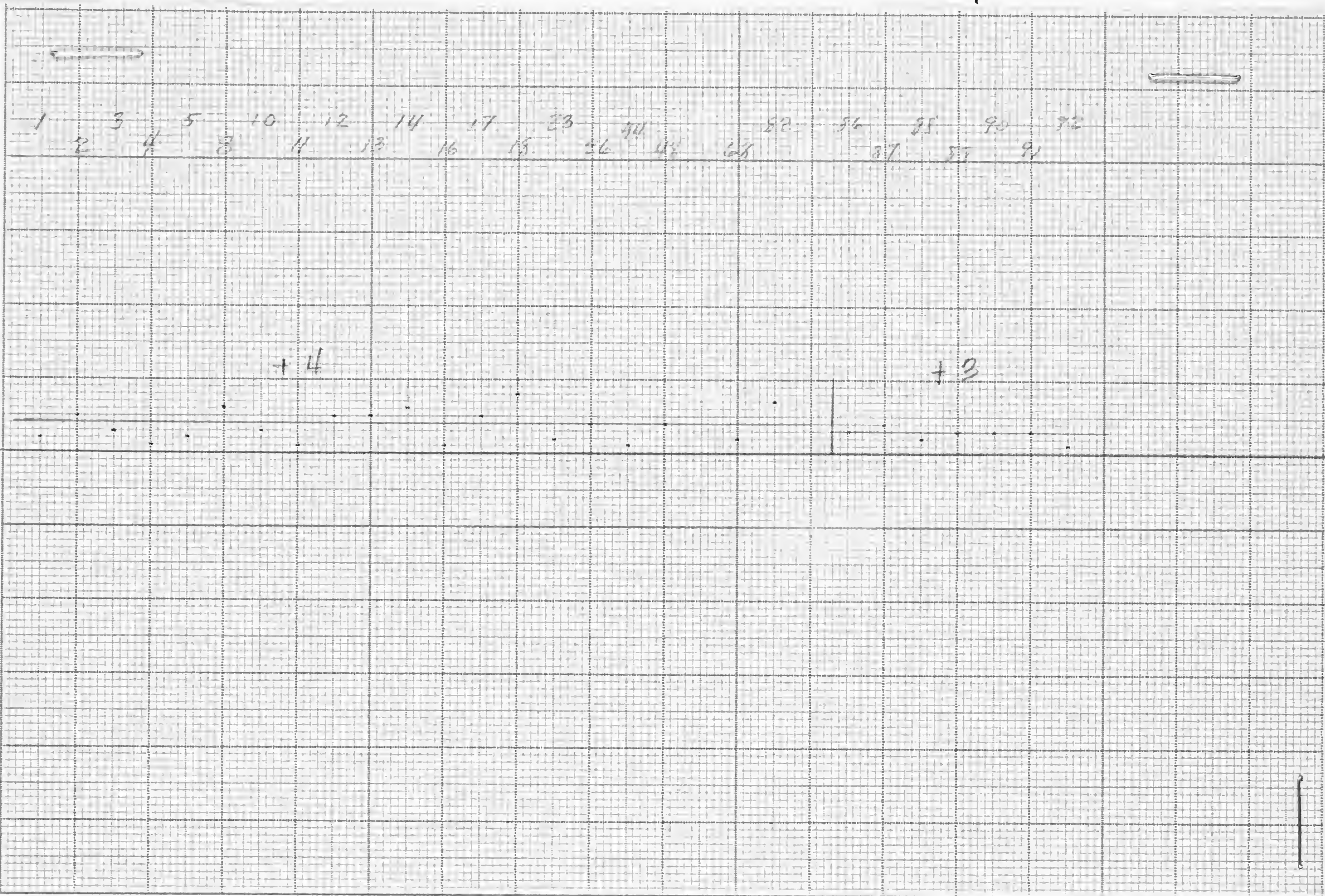
Sta. #	Local Time	Time			Lat. N	Long. W	Salinity	Temp. °C.
		Day	Mo.	Year				
1	1800	5	VI	64	21° 03'	158° 32'		26.1
2	2100	5	VI	64	20 54	159 06		25.5
3	1200	6	VI	64	19 52	161 38		26.2
4	1500	6	VI	64	19 37	162 07		26.1
5	1800	6	VI	64	19 24	162 37		26.0
* 6	2100	6	VI	64	19 17	163 01		25.85
* 7	2400	6	VI	64	19 03	163 38		25.7
8	0300	7	VI	64	18 55	164 04		26.0
* 9	0900	7	VI	64	18 29	165 16		26.1
10	1200	7	VI	64	18 15	165 48		26.4
11	1500	7	VI	64	18 10	166 13		26.6
12	1800	7	VI	64	18 03	166 33		26.0
13	2100	7	VI	64	17 51	166 58		26.2
14	0000	8	VI	64	17 36	167 27		26.2
* 15	0600	8	VI	64	17 08	168 22		25.9
16	1200	8	VI	64	16 42	169 20		26.9
17	1800	8	VI	64	15 45	169 13		26.2
18	2100	8	VI	64	15 21	169 05		25.9
23	1300	9	VI	64	13 12	170 10		27.3
26	2200	9	VI	64	12 10	171 15		27.2
* 34	1400	10	VI	64	13 45	170 46		27.3
44	0800	11	VI	64	15 35	170 02		26.55
48	1700	11	VI	64	14 31	171 12		27.1
* 54	0300	12	VI	64	13 16	172 29		27.1
* 62 *	1900	12	VI	64	15 02	171 49		27.0
68	0800	13	VI	64	16 20	170 43		26.8
82	2300	14	VI	64	16 17	173 01		26.5
* 84	1200	15	VI	64	17 33	171 43		26.9
* 85	2100	15	VI	64	18 38	170 42		26.7
86	0600	16	VI	64	19 43	169 50		26.5
87	0900	16	VI	64	20 07	169 22		26.6
88	1500	16	VI	64	20 45	168 47		26.9
89	1800	16	VI	64	21 08	168 26		26.4
90	2100	16	VI	64	21 28	168 00		26.0
91	0600	17	VI	64	22 42	167 04		25.5
92	1200	17	VI	64	23 24	166 25		25.6

* - These traces no good.

* - The data probably was not used in the BT.

#89

71.
1000.



KEUFFEL & ESSER CO NEW YORK.

89

BT 62347A

June

1	1800	5	VI	1964	21° 03'	158° 32'	1	34.888	26.1	1	+10 time
2	2100				20° 54'	159° 06'		36.191	25.5	2	
3	1200	6	VI	1964	19° 52'	161° 38'		34.932	26.2	3	
4	1500				19° 37'	162° 07'		34.772	26.1	4	
5	1800				19° 24'	162° 37'		34.814	26.0	5	

Smithsonian cruises hydrographic data

Cruise number	Station number	LZT	Time and date			Lat.	N-S	Long.	E-W	Depth in m	Salinity o/oo	Water temp °C	BT station number	
89	6	2100	6	VI	1964	19° 17'	N	163° 01'	W	1	34.767	25.8	6	+10 time
	7	2400				19° 03'		163° 38'			34.732	25.7	7	
	8	0300	7	VI	1964	18° 55'		164° 04'			34.698	26.0	8	
	9	0900				18° 29'		165° 16'			34.954	26.1	9	+11 time
	10	1200				18° 15'		165° 48'			35.185	26.4	10	
	11	1500				18° 10'		166° 13'			34.932	26.6	11	
	12	1800				18° 03'		166° 33'			34.854	26.0	12	
	13	2100				17° 51'		166° 58'			34.873	26.2	13	
	14	0000	8	VI	1964	17° 36'		167° 27'			34.919	26.2	14	
	15	0600				17° 08'		168° 22'			34.782	25.9	15	
	16	1200				16° 42'		169° 20'			34.792	26.9	16	
	17	1800				15° 45'		169° 13'			35.312	26.2	17	
	18	2100				15° 21'		169° 05'			34.819	25.9	18	
	19	0700	9	VI	1964	13° 58'		169° 24'			34.754	26.2	--	
	23	1300				13° 12'		170° 10'			34.660	27.3	19	
	27	2200				12° 10'		171° 15'			34.609	27.2	20	
	32	0700	10	VI	1964	13° 10'		171° 25'			34.826	27.0	--	
										7	34.966	27.2		
										11	35.062	27.0		
										24	35.033	27.0		
										110	36.205	24.0		
	34	1400				13° 45'		170° 46'		1	34.774	27.3	21	
	43	0630	11	VI	1964	15° 31'		169° 55'			35.328	26.4	--	
										9	35.610	26.2		
										12	35.668	26.2		
										26	35.504	26.2		
										117	35.110	24.1		
	44	0800				15° 35'		170° 12'		1	34.924	26.6	22	
	48	1700				14° 31'		171° 12'			34.901	27.1	23	
	54	0300	12	VI	1964	13° 16'		172° 29'			34.828	27.1	24	
	56	0630				13° 41'		172° 57'			34.671	26.9	--	
	62	1900				15° 02'		171° 49'			34.720	27.0	25	
	67	0630	13	VI	1964	16° 15'		170° 37'			34.913	26.5	--	

Smithsonian cruises hydrographic data

Cruise number	Station number	Time LZT	and date			Lat.	N-S	Long.	E-W	Depth in m	Salinity o/oo	Water temp °C	BT station number
89	67	0630	13	VI	1964	16° 15'	N	170° 37'	W	8	34.932	26.5	--
										11	35.024	26.4	
										25	35.126	26.4	
										115	35.215	24.5	
	68	0800				16° 20'		170° 43'		1	34.748	26.8	26
	77	0630	14	VI	1964	14° 29'		173° 44'			34.786	26.7	--
										7	34.842	26.8	
										10	34.915	26.9	
										24	34.977	26.9	
										111	35.258	25.2	
	82	2300				16° 17'		173° 01'		1	34.697	26.5	27
	83	0630	15	VI	1964	17° 01'		172° 14'			34.915	26.7	--
										9	35.014	26.6	
										13	35.122	26.9	
										26	35.342	26.8	
										120	35.830	24.5	
	84	1200				17° 33'		171° 43'		1	34.740	26.9	28
	85	2100				18° 38'		170° 42'			34.830	26.6	29
	86	0600	16	VI	1964	19° 43'		169° 50'			34.590	26.5	30
	87	0900				20° 07'		169° 22'			34.618	26.6	31
	88	1500				20° 45'		168° 47'			34.818	26.9	32
	89	1800				21° 08'		168° 26'			34.770	26.4	33
	90	2100				21° 28'		168° 00'			34.820	26.0	34
	91	0600	17	VI	1964	22° 42'		167° 04'			35.002	25.5	35
	92	1200				23° 24'		166° 25'			35.094	25.6	36